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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,993	04/04/2002	Pierre Etienne Chabrier de Lassauniere	427.057	5815
20311	7590	02/26/2004	EXAMINER	
MUSERLIAN AND LUCAS AND MERCANTI, LLP			ANDERSON, REBECCA L	
475 PARK AVENUE SOUTH			ART UNIT	
NEW YORK, NY 10016			PAPER NUMBER	

1626

DATE MAILED: 02/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/089,993

Applicant(s)

CHABRIER DE LASSAUNIERE ET AL.

Examiner

Rebecca L Anderson

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

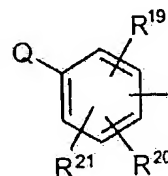
Claims 1-20 are currently pending in the instant application. The lack of unity requirement mailed 13 June 2003 is withdrawn in view of the following new lack of unity requirement.

### *Election/Restrictions*

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Due to the numerous variables in the claims, e.g., , etc. and their widely divergent meanings, a precise listing of inventive groups cannot be made. The following groups are exemplary:

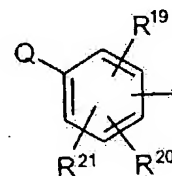
**Group I**, claims 1-15 drawn to methods of use of the compound of the formula (I) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that formula (I) corresponds exclusively to the sub formula (I)1, **A** is wherein **Q** is OR<sub>22</sub> wherein **R<sub>22</sub>** represents a hydrogen atom, an alkyl radical or an aryl radical optionally substituted by one or more substituents chosen from the alkyl, OH, halogen, nitro and alkoxy radicals, **R<sub>19</sub>**, **R<sub>20</sub>** and **R<sub>21</sub>** represent independently, a hydrogen, a halogen, or an alkyl, cycloalkyl, alkenyl, alkoxy, cyano or nitro, **X** represents S, **n** is 0 to 6, **R<sub>1</sub>** and **R<sub>2</sub>** independently, represent a hydrogen atom or an alkyl, **B** represents a hydrogen atom or an alkyl radical and **Ω** represents NR<sub>46</sub>R<sub>47</sub> wherein **R<sub>46</sub>** and **R<sub>47</sub>** represent independently, a hydrogen atom or an alkyl.



**Group II**, claims 1-15 drawn to methods of use of the compound of the formula (I) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that formula (I) corresponds exclusively to the sub formula (I)4, **A** is 4-hydroxy-2,3-di-tert-butyl-phenyl, **B**, **R1** and **R2** all represent H and  $\Omega$  represents OH and **n** is 0 to 6.

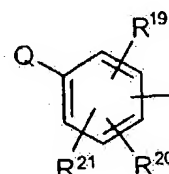
**Group III**, claims 1-15 drawn to methods of use of the compound of the formula (I) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that formula (I) corresponds exclusively to the sub formula (I)1, **A** is

wherein **Q** is OR<sub>22</sub> wherein **R<sub>22</sub>** represents a hydrogen atom, an alkyl radical or an aryl radical optionally substituted by one



or more substituents chosen from the alkyl, OH, halogen, nitro and alkoxy radicals, **R<sub>19</sub>**, **R<sub>20</sub>** and **R<sub>21</sub>** represent independently, a hydrogen, a halogen, or an alkyl, cycloalkyl, alkenyl, alkoxy, cyano or nitro, **X** represents NR<sub>38</sub>, **R<sub>38</sub>** representing a hydrogen atom or an alkyl, cyanoalkyl, aralkyl, alkylcarbonyl or aralkylcarbonyl radical, **n** is 0 to 6, **R<sub>1</sub>** and **R<sub>2</sub>** independently, represent a hydrogen atom or an alkyl, **B** represents a hydrogen atom or an alkyl radical and  $\Omega$  represents NR<sub>46</sub>R<sub>47</sub> wherein **R<sub>46</sub>** and **R<sub>47</sub>** represent independently, a hydrogen atom or an alkyl.

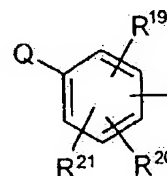
**Group IV**, claims 16-18 drawn to compositions of the formula (II) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that the formula (II) corresponds exclusively to the sub-formula (II)1, **A** represents



Wherein **Q** represents OH or a phenyl radical substituted by an OH radical and one or more of the radicals chosen independently from a halogen atom and an OH, alkyl, alkoxy or NR<sup>10</sup>R<sup>11</sup> radical in which **R<sup>10</sup>** and **R<sup>11</sup>** represent independently a hydrogen atom or an alkyl radical, **R<sup>19</sup>**, **R<sup>20</sup>** and **R<sup>21</sup>** represent independently, a hydrogen, a halogen, or an alkyl, cycloalkyl, alkenyl, alkoxy, cyano or nitro, **X** is S, **B** represents a hydrogen atom or an alkyl radical and **Ω** represents NR<sup>46</sup>R<sup>47</sup> wherein **R<sup>46</sup>** and **R<sup>47</sup>** represent independently, a hydrogen atom or an alkyl, **R<sup>1</sup>** and **R<sup>2</sup>** independently, represent a hydrogen atom or an alkyl and **n** is 0-6.

**Group V**, claims 16-18 drawn to compositions of the formula (II) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that formula (II) corresponds exclusively to the sub formula (II)4, **A** is 4-hydroxy-2,3-di-tertobutyl-phenyl, **B**, **R<sup>1</sup>** and **R<sup>2</sup>** all represent H and **Ω** represents OH and **n** is 0 to 6.

**Group VI**, claims 16-18 drawn to compositions of the formula (II) wherein wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that the formula (II) corresponds exclusively to the sub-formula (II)3, **A** represents



Wherein **Q** represents OH or a phenyl radical substituted by an OH radical and one or more of the radicals chosen independently from a halogen atom and an OH, alkyl, alkoxy or NR<sup>10</sup>R<sup>11</sup> radical in which **R<sup>10</sup>** and **R<sup>11</sup>** represent independently a hydrogen atom or an alkyl radical, **R<sup>19</sup>**, **R<sup>20</sup>** and **R<sup>21</sup>** represent independently, a hydrogen, a halogen, or an alkyl, cycloalkyl, alkenyl, alkoxy, cyano or nitro, **Y** is O, **B** represents a hydrogen

atom or an alkyl radical and  $\Omega$  represents NR46R47 wherein **R46** and **R47** represent independently, a hydrogen atom or an alkyl, **R1** and **R2** independently, represent a hydrogen atom or an alkyl and **n** is 0-6.

**Group VII**, claims 19-20 drawn to compounds of the formula (III) wherein **Het** is a heterocycle with 5 members comprising 2 heteroatoms and such that formula (III) corresponds exclusively to the sub formula (III)4, **A** is 4-hydroxy-2,3-di-tertobutyl-phenyl, **B**, **R1** and **R2** all represent H and  $\Omega$  represents OH and **n** is 0 to 6.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted. Again, this list is not exhaustive as it would be impossible under the time constraints due to the sheer volume of subject matter instantly claimed. Therefore, applicant may choose to elect a single invention (a product, or a method of use) by identifying another specific embodiment not listed in the exemplary groups of the invention and examiner will endeavor to group the same. The applicant may also choose to elect a single invention along with a single disclosed species and the examiner will endeavor to create a group comprising the elected species.

The claims herein lack unity of invention under PCT rule 13.1 and 13.2 since, under 37 CFR 1.475(a) the compounds defined in the claims lack a significant structural element qualifying as the special technical feature that defines a contribution over the prior art. The compounds claimed contain a carbon atom which does not define a contribution over the prior art. The variables on the carbon atom vary extensively and when taken as a whole result in vastly different compounds. Accordingly, unity of

invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered to be proper. Additionally, the vastness of the claimed subject matter, and the complications in understanding the claimed subject matter imposes a serious burden on any examination of the claimed subject matter.

Furthermore, even if unity of invention under 37 CFR 1.475(a) is not lacking, under 37 CFR 1.475(b) a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and a process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

And, according to 37 CFR 1.475(c)

if an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b), unity of invention might not be present.

Therefore, since the claims are drawn to more than a product and more than a method of use, and according to 37 CFR 1.475 (e)

the determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

The claims lack unity of invention and should be limited to only a product or a use of the said product.

### Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday 5:30AM to 2:00PM.

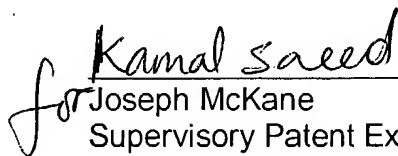
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph McKane, can be reached at (571) 272-0699.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone numbers are (703) 308-1235 and (703) 308-0196.

A facsimile center has been established. The hours of operation are Monday through Friday, 8:45AM to 4:45PM. The telecopier number for accessing the facsimile machine is (703) 872-9306



Rebecca Anderson  
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